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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/686,210	10/11/2000	Galyn A. Schulz	2107 (FJ-98-4)	6128

7590 07/21/2003  
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EXAMINER

YAN, REN LUO

ART UNIT PAPER NUMBER

2854

DATE MAILED: 07/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/686,210

Applicant(s)

SCHULZ, GALYN A.

Examiner

Ren L Yan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 May 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5, 7-13 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-13 and 17-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5-21-2003 has been entered.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 7-13 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schulz(5,269,983) in view of Grupe(5,215,617). The patent to Schulz teaches the structure and method of an embossing apparatus as claimed including a steel embossing roller 50 having protuberances 52 thereon corresponding to a desired embossed pattern, and a resilient rubber roller 54 having recesses 56 provided corresponding to the embossed pattern of the protuberances 52. The resilient rubber roller 54 can work the paper as it is deformably engaged with the steel roller to generate embossed patterns on the paper and the steel/rubber embossing roller pair does not encounter excess wear or damage by any contaminants contained in the web being embossed. See the entire Schulz patent for details. However, the hardness of the steel roller and the hardness of the rubber roller were not given in the Schulz patent and it is unclear whether or not laser was used to engrave the embossing rollers. The patent to Grupe teaches in a similar embossing apparatus using a steel and rubber embossing roller pair the teaching of

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providing the rubber roller having a hardness of 100 Shore A or less, preferably from about 50 to about 80 Shore A hardness because the rubber materials with that hardness ratings can be easily laser engraved to the desired embossing element shape and are more forgiving to the web being embossed such that the strength of the web is not degraded. See column 2, lines 10-17 in Grupe for example. It would have been obvious to those having ordinary skill in the art to provide the embossing rollers of Schulz with the rubber materials having a hardness of 100 Shore A or less, preferably from 50-80 Shore A hardness as taught by Grupe for the ease of manufacture of the rubber roller and the improved quality of the embossed web product. With respect to the hardness of the steel roller used in either the Schulz or the Grupe patents, since the softer rubber roller can have a hardness of up to a 100 Shore A, the more rigid steel roller will have to have a Shore A hardness of at least 90 as claimed in order for the steel/rubber embossing roller pair to work properly as intended. With respect to claim 10, when the rubber roller of Schulz is worn, one of ordinary skill in the art would be motivated to replace such a worn rubber roller with one having Shore A hardness in the range of 50-80 as taught by Grupe in order to prolong the service life of the embossing apparatus and also to enjoy the benefits of using such a rubber roller as discussed above.

Applicant's arguments filed on 5-21-2003 and the declaration filed on 6-27-2002 under 37 CFR 1.132 have been fully considered but they are not persuasive. There is no doubt that the present invention will work the way it was intended to protect the embossing machine from being damaged when working on a fibrous web containing recycled pulp. However, the embossing machine as collectively taught by Schulz and Grupe as suggested above would accomplish the same result since the embossing machine having a steel embossing roller at Shore

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A hardness of 90 or more and an engraved rubber roller at Shore A hardness of 50-80 taught by Schulz and Grupe would have the exact same structure and would function exactly the same way when working on a fibrous web containing recycled pulp. Even though neither Schulz nor Grupe discusses the problems associated with processing recycled fiber, one of ordinary skill in the art would have known that the embossing machine as taught by Schulz and Grupe is well capable of processing fibrous web containing recycled pulp without suffering excessive wear due to the contaminants in the pulp simply because this embossing machine having the steel and rubber embossing roller pair with their respective Shore A hardness would tolerate the contaminants in the recycled pulp the same way as would the embossing machine of the present invention. In the paragraph 7 of the declaration offered by Galyn A. Schulz, a comparison between the present invention and a steel/steel embossing roller pair of the known prior art was made. It is no doubt that the present invention with the steel/rubber embossing roller pair works much better in handling a web having contaminants in it compared with the conventional steel/steel embossing roller pair. However, this comparison has missed the point. The applied prior art references all teach the use of steel/rubber embossing roller pair that would conceivably accomplish the same outcome as did the present invention. There is nothing on record or in the declaration of Galyn A. Schulz to show that the present invention would achieve unexpected results over the known prior art as applied in the forgoing rejections.

All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action

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after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ren L Yan whose telephone number is 703-308-0978. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on 703-305-6619. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

  
Ren L Yan  
Primary Examiner  
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Ren Yan  
July 17, 2003